

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/006961

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07F9/40 C07F9/54 C07C305/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07F C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2004/016631 A (ROBERTSON ALLAN J ; ZHOU YUEHUI (CA); BAUMANN DOUGLAS (CA); CYTEC CANA) 26 February 2004 (2004-02-26) page 2, line 23 – page 5, line 6 page 8, line 30 – page 9, line 4 page 11, line 22 – page 15, line 6; examples 1-6 page 16, line 25 – page 24; claims 1-13; example 10 -----	1-56
Y	WO 02/079212 A (ROBERTSON ALLAN JAMES ; SEDDON KENNETH RICHARD (IE); CYTEC TECH CORP () 10 October 2002 (2002-10-10) page 36 – page 39; claims 1-18 -----	1-56 -/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the International filing date
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- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the International filing date but later than the priority date claimed

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- \*'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*& document member of the same patent family

Date of the actual completion of the International search	Date of mailing of the International search report
30 July 2004	05/08/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Palenlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016	Authorized officer Kyriakakou, G

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C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/87900 A (ROBERTSON ALLAN JAMES ; CYTEC TECH CORP (US)) 22 November 2001 (2001-11-22)  page 6, line 21 - line 30 page 9; examples 1,2 page 10; table 1 page 18 - page 19; claims 1-6,8,9,11-14 -----	1-5, 15-22, 30-37, 50,53,54
X	WO 03/020843 A (ROBERTSON ALLAN JAMES ; EARLE MARTYN JOHN (GB); HARDACRE CHRISTOPHER () 13 March 2003 (2003-03-13) page 21; claim 2 page 23, line 4 - line 5; claim 8 -----	30-37, 49-54
Y	EP 0 895 997 A (BASF AG) 10 February 1999 (1999-02-10) page 4, line 40 - page 5, line 50; claims 1-7 -----	1-56
Y	EP 0 675 130 A (SHINETSU CHEMICAL CO) 4 October 1995 (1995-10-04) page 6; claims 1,2 -----	1-56
Y	KANAZAWA A ET AL: "POLYMERIC PHOSPHONIUM SALTS AS A NOVEL CLASS OF CATIONIC BIOCIDES. II. EFFECTS OF COUNTER ANION AND MOLECULAR WEIGHT ON ANTIBACTERIAL ACTIVITY OF POLYMERIC PHOSPHONIUM SALTS" JOURNAL OF POLYMER SCIENCE, POLYMER CHEMISTRY EDITION, JOHN WILEY AND SONS. NEW YORK, US, vol. 31, no. 6, 1993, pages 1441-1447, XP001007322 ISSN: 0360-6376 the whole document -----	1-56

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US2004/006961

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 2004016631	A	26-02-2004	CA WO	2398682 A1 2004016631 A1		16-02-2004 26-02-2004
WO 02079212	A	10-10-2002	CA BR EP WO US	2343456 A1 0208199 A 1373280 A1 02079212 A1 2004106823 A1		30-09-2002 02-03-2004 02-01-2004 10-10-2002 03-06-2004
WO 0187900	A	22-11-2001	CA AU EP WO	2308896 A1 5550401 A 1287007 A1 0187900 A1		18-11-2001 26-11-2001 05-03-2003 22-11-2001
WO 03020843	A	13-03-2003	CA WO	2356709 A1 03020843 A1		05-03-2003 13-03-2003
EP 0895997	A	10-02-1999	DE DE EP ES JP US US US	19734446 A1 59806098 D1 0895997 A1 2186065 T3 11130787 A 2002128516 A1 6187959 B1 6433226 B1		11-02-1999 12-12-2002 10-02-1999 01-05-2003 18-05-1999 12-09-2002 13-02-2001 13-08-2002
EP 0675130	A	04-10-1995	JP JP US DE DE EP	3467307 B2 7267970 A 5481040 A 69514133 D1 69514133 T2 0675130 A2		17-11-2003 17-10-1995 02-01-1996 03-02-2000 25-05-2000 04-10-1995